CHAPTER 73-1 INTRODUCTION

73-1.1 BACKGROUND

A. The Maintenance and Improvement (M&I) sub-activity has been level funded for several years while the M&I eligible gross square meters continues to grow. This has resulted in reduced and/or deferred maintenance. Reducing the level on maintenance results in deterioration of real property and an increase in cost and need for future repairs. In order to identify the extent of the problem, the IHS needs to improve on the reporting mechanism to identify the backlog of essential maintenance and repair (BEMAR). Once the BEMAR has been identified, correction of the deficiencies becomes an integral part of the planning process. Facilities managers will then have a concise list of specific actions and alternative methods for restoring and maintaining the physical plant and functional adequacy of each installation. Projects can be developed to systematically correct the deficiencies. The Facilities Engineering Deficiency System (FEDS) is a vehicle used to store the data base generated from facilities condition surveys referred to in IHS as deep look surveys.

B. Identified FEDS deficiencies are divided into categories to allow arranging the deficiencies into workable groups. Each category in turn is assigned a code for identification in the FEDS data base.

The following categories and codes are utilized:

01 - PATIENT CARE	02 - LIFE SAFETY COMPLIANCE
03 - ~~OCCUPATIONAL~~ General SAFETY	04 - ENVIRONMENTAL COMPLIANCE
05 - PROGRAM IMPROVEMENTS	06 - FUTURE
07 - HANDICAPPED COMPLIANCE	08 - ENERGY CONSERVATION

10 - BEMAR ARCHITECTURAL

09 - 10 FUTURE

11 - BEMAR STRUCTURAL

12 - BEMAR MECHANICAL

13 - BEMAR ELECTRICAL

14 - FUTURE

15 - BEMAR GROUNDS

16 - BEMAR QUARTERS

73-1.2 PURPOSE

The purpose of a FEDS database is to manage information on the current conditions at a facility to:

A. Compare an installation's condition and functional performance to other IHS installations;

B. Define capital repair and replacement projects in order to eliminate the BEMAR;

C. Develop cost estimates for planning projects;

D. Restore functionally obsolete installations to a usable condition;

E. Eliminate conditions that are either potentially damaging to the property or present life safety hazards;

F. Identify energy conservation measures required to meet Public Law requirements;

G. Analyze each facility for physical condition, economic life expectancy, deficiency corrective action, project completion time span, and estimated cost of correction;

H. Determine facilities assets and redistribution of existing resources;

I. Prepare a program plan that provides justification for changes in location, consolidation, and priorities, or provide new solutions;

J. Identify possibilities of additional resources; and

K. Better forecast the facilities budget.

73-1.3 SCOPE

Identified deficiencies typically are:

A. Premature systems deterioration from lack of maintenance to:

(1) Exterior and interior finishes such as paint, flooring, and roof systems

(2) Electrical and mechanical equipment such as ventilation and exhaust fan bearings, electrical windings, and plumbing.

B. Degradation of environmental quality due to lack of:

(1) Filters or improperly-sized replacement filters in air distribution systems;

(2) Site monitoring of underground fuel storage tanks; and

(3) Backflow preventers to protect public and domestic water systems, vacuum breakers on hose bibs, lab sinks, film processors, and similar equipment.

C. Change in program requirements resulting from:

(1) Lack of adequate isolation rooms;

(2) Change in use of space function; and

(3) Lack of space for storage, proper maintenance access, or new electronic equipment.

D. Compliance with Public Law requirements regarding;

(1) Handicap accessibility,

(2) Environmental, and

(3) Energy conservation.

E. Design/construction oversights resulting in a lack of:

(1) Outside air intakes for medical/dental compressors or heating equipment combustion air; and

(2) Space to access equipment for maintenance.

F. Energy inefficiencies such as:

(1) Inadequate cooling of electrical and mechanical equipment,

(2) No temperature setback mechanisms, and

(3) Poorly operating ventilation systems.

73-1.4 IMPLEMENTATION

A. After a deep look survey report is received in the Area facilities office the information is entered into the FEDS data base. This database is then utilized by facilities managers as a means of generating projects for their annual Facilities Engineering Program Plan (FEPP). Each IHS Area office in turn consolidates all the individual service unit FEPP's and prioritize the total workload to determine the Area's construction workload for each fiscal year. Approval of the FEPP's by each respective Associate Area Director OEHE results in funding of those projects that are most critical and which are within each Area's annual funding allocation. Corrective actions on the FEDS issues is then carried out.

B. The overall database is utilized by management to determine priorities and weigh the aggregate cost of correcting individual deficiencies versus replacement of any particular installation. Corrective actions and their cost estimates will assist program managers and facilities managers in making determinations about their installation.

73-1.5 BENEFITS

A. The following benefits result from the FEDS program:

(1) Facilities accreditation requirements are met,

(2) Building systems are effectively evaluated and corrective actions lead to replacement and/or assist in more effective maintenance and operation,

(3) Life expectancy of building systems is prolonged,

(4) Work environment is improved,

(5) Ultimately customers are better satisfied with services provided at the facility, and

(6) Compliance with Public Law is achieved.

B. Changing technology results in the need for installation of new sophisticated medical and non-medical personal property equipment in our facilities. If real property mechanical and electrical systems are not upgraded to meet the requirements of the new personal property equipment, serious deficiencies could lead to ineffective utilization of the new equipment. Also, the original design of the facility and changes in program requirements over the course of time frequently do not allow for increase in space. As a result the existing facility is burdened with ineffective flow of operations.